RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	
Source:	IFWP.
Date Processed by STIC:	08/14/2006
	- //

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 08/14/2006
PATENT APPLICATION: US/10/588,431 TIME: 13:49:39

Input Set : A:\05-222-PCT SeqList REV.txt
Output Set: N:\CRF4\08142006\J588431.raw

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3 <110> APPLICANT: Arizona Board of Regents, on Behalf of Arizona State
             University
      6 <120> TITLE OF INVENTION: Rational Design and Engineering of Proteins and
Peptides for
              Immunomodulation
      9 <130> FILE REFERENCE: 05-222-PCT; M4-043
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/588,431
C--> 12 <141> CURRENT FILING DATE: 2006-08-04
     14 <160> NUMBER OF SEQ ID NOS: 7
     16 <170> SOFTWARE: PatentIn version 3.3
     18 <210> SEQ ID NO: 1
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     20 <212> TYPE: PRT
    21 <213> ORGANISM: Artificial
    23 <220> FEATURE:
    24 <223> OTHER INFORMATION: Synthetic; GC-MAF
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    32 Lys Val Lys Ala Leu Gly Asn Ala Thr Pro Thr Glu Leu Ala Lys Lys
    36 Lys Trp Glu Glu Leu Lys Lys Lys Ile Glu Glu Leu Gly Asn Ala Thr
                                    40
    40 Pro Thr Glu Val Lys Lys Val Glu Glu Val Lys Lys Leu Glu Glu
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    44 Glu Ile Lys Lys Leu
    45 65
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    50 <212> TYPE: PRT
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    66 Lys Trp Glu Glu Leu Lys Lys Lys Ile Glu Glu Leu Gly Asn Ala Thr
                                    40
    70 Pro Thr Glu Val Lys Lys Val Glu Glu Glu Val Lys Lys Leu Glu Glu
    74 Glu Ile Lys Lys Leu
    75 65
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RAW SEQUENCE LISTING DATE: 08/14/2006 PATENT APPLICATION: US/10/588,431 TIME: 13:49:39

Input Set: A:\05-222-PCT SeqList REV.txt
Output Set: N:\CRF4\08142006\J588431.raw

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84 <223> OTHER INFORMATION: Synthetic; GC-MAF
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92 Lys Val Lys Ala Leu Gly Asn Ala Thr Pro Thr Glu Leu Ala Lys Lys
               20
                                   25
96 Lys Trp Glu Glu Leu Lys Lys Ile Glu Glu Leu Gly Gly Gly Gly
                               40
100 Glu Val Lys Lys Val Glu Glu Glu Val Lys Leu Glu Glu Glu Ile
101
        50
104 Lys Lys Leu
105 65
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111 <213> ORGANISM: Artificial
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123 <211> LENGTH: 10
124 <212> TYPE: PRT
125 <213 > ORGANISM: Artificial
127 <220> FEATURE:
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146 <222> LOCATION: (1)..(1)
147 <223> OTHER INFORMATION: X stands for G, P, A, N, or S, (or is absent).
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151 <222> LOCATION: (2)..(2)
152 <223> OTHER INFORMATION: X stands for N, D, E, or G (or is absent).
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DATE: 08/14/2006

TIME: 13:49:39

Input Set : A:\05-222-PCT SeqList REV.txt Output Set: N:\CRF4\08142006\J588431.raw 154 <220> FEATURE: 155 <221> NAME/KEY: MISC FEATURE 156 <222> LOCATION: (3)..(3) 157 <223> OTHER INFORMATION: X stands for A, G, L, V, or F (or is absent). 159 <220> FEATURE: 160 <221> NAME/KEY: MISC_FEATURE 161 <222> LOCATION: (4)..(4) 162 <223> OTHER INFORMATION: X stands for T, N, S, K, E, Q, or D (or is absent). 164 <220> FEATURE: 165 <221> NAME/KEY: MISC FEATURE 166 <222> LOCATION: (5)..(5) 167 <223> OTHER INFORMATION: X stands for P or G (or is absent). 169 <220> FEATURE: 170 <221> NAME/KEY: MISC FEATURE 171 <222> LOCATION: (6)..(6) 172 <223> OTHER INFORMATION: X stands for T, S, K, E, D, N, or Q (or is absent). 174 <220> FEATURE: 175 <221> NAME/KEY: MISC FEATURE 176 <222> LOCATION: (7)..(7) 177 <223> OTHER INFORMATION: X stands for E, N, Q, D, K, or R (or is absent). 179 <220> FEATURE: 180 <221> NAME/KEY: MISC FEATURE 181 <222> LOCATION: (8)..(8) 182 <223> OTHER INFORMATION: X stands for L, A, V, I, F, W, or Y (or is absent). 184 <220> FEATURE: 185 <221> NAME/KEY: MISC FEATURE 186 <222> LOCATION: (9)..(9) 187 <223> OTHER INFORMATION: X stands for A, L, V, I, F, W, Q, or N (or is absent). 189 <220> FEATURE: 190 <221> NAME/KEY: MISC FEATURE 191 <222> LOCATION: (10)..(10) 192 <223> OTHER INFORMATION: X stands for K, R, D, E, N, or Q (or is absent). 194 <400> SEQUENCE: 6 W--> 196 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa 197 1 200 <210> SEQ ID NO: 7 201 <211> LENGTH: 10 202 <212> TYPE: PRT 203 <213> ORGANISM: Artificial 205 <220> FEATURE: 206 <223> OTHER INFORMATION: Synthetic, Loop 2 Sequences 209 <220> FEATURE: 210 <221> NAME/KEY: MISC_FEATURE 211 <222> LOCATION: (1)..(1) 212 <223> OTHER INFORMATION: X stands for G, P, A, N, or S (or is absent). 214 <220> FEATURE: 215 <221> NAME/KEY: MISC FEATURE 216 <222> LOCATION: (2)..(2) 217 <223> OTHER INFORMATION: X stands for N, E, D, or G (or is absent).

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/588,431

RAW SEQUENCE LISTING DATE: 08/14/2006 PATENT APPLICATION: US/10/588,431 TIME: 13:49:39

Input Set : A:\05-222-PCT SeqList REV.txt
Output Set: N:\CRF4\08142006\J588431.raw

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     220 <221> NAME/KEY: MISC FEATURE
     221 <222> LOCATION: (3)..(3)
     222 <223> OTHER INFORMATION: X stands for A, G, L, V, or F (or is absent).
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     226 <222> LOCATION: (4)..(4)
     227 <223> OTHER INFORMATION: X stands for T, N, S, K, E, D, or O (or is
absent).
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     231 <222> LOCATION: (5)..(5)
     232 <223> OTHER INFORMATION: X stands for P or G (or is absent).
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     236 <222> LOCATION: (6)..(6)
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absent).
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     241 <222> LOCATION: (7)..(7)
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     246 <222> LOCATION: (8)..(8)
     247 <223> OTHER INFORMATION: X stands for V, A, L, I, F, W, or Y (or is
absent).
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     251 <222> LOCATION: (9)..(9)
     252 <223> OTHER INFORMATION: X stands for K, R, D, E, N, Q, or A (or is
absent).
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     256 <222> LOCATION: (10)..(10)
     257 <223> OTHER INFORMATION: X stands for K, R, D, E, N, or Q (or is absent).
     259 <400> SEOUENCE: 7
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     262 1
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/14/2006
PATENT APPLICATION: US/10/588,431 TIME: 13:49:40

Input Set : A:\05-222-PCT SeqList REV.txt
Output Set: N:\CRF4\08142006\J588431.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220>

to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; Xaa Pos. 1,2,3,4,5,6,7,8,9,10 Seq#:7; Xaa Pos. 1,2,3,4,5,6,7,8,8,10

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7

VERIFICATION SUMMARY

. . . .

DATE: 08/14/2006 TIME: 13:49:40

Input Set : A:\05-222-PCT SeqList REV.txt

Output Set: N:\CRF4\08142006\J588431.raw

 $L:11\ M:270\ C:$ Current Application Number differs, Replaced Current Application Number

PATENT APPLICATION: US/10/588,431

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0 L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0